

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* TRACY E. THIERET,  
STEPHEN P. HOOVER, WILLIAM J. HANNAWAY,  
and NAVEEN SHARMA

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Appeal 2007-0719  
Application 09/731,205  
Technology Center 2600

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Decided: May 30, 2007

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Before JAMES D. THOMAS, JOSEPH L. DIXON and JEAN R. HOMERE,  
*Administrative Patent Judges.*

HOMERE, *Administrative Patent Judge.*

DECISION ON APPEAL  
STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the Examiner's Final Rejection of claims 1 through 23. We have jurisdiction under 35 U.S.C. § 6(b) to decide this appeal.

Appellants invented a distributed system (10) with a parallel configuration for facilitating communication with a printer (marking engine 12) on a network (18) via an intelligent network interface (20). More specifically, the intelligent network interface (20) segregates data received from the network (18) to route received control data directly to the printer (12) while forwarding received job data to the printer (12) via a printer controller (16). (Specification 3.)

Claim 1 is illustrative of the claimed invention. It reads as follows:

1. A network document system including:

a document processing device,

a document processing device controller and

a network interface controller for communicating job data and control data to and from a network, wherein the interface controller is disposed, between the document processing device controller and the network, and in parallel communication with the document processing device and document processing device controller, for segregating the job data and the control data, and wherein the segregated control data is directly communicated between the network interface controller and the document processing device which document processing device controller is disposed between the network interface controller and the document processing device for translating the job data, which is communicated from the network interface controller to the document processing device independently from the control data, into data format executable by the document processing device.

In rejecting the claims on appeal, the Examiner relied upon the following prior art:

Suzuki	US 5,270,775	Dec. 14, 1993
Sorkin	US 5,898,823	Apr. 27, 1999
Irie	US 6,606,164 B1	Aug. 12, 2003
		(filed Aug. 12, 1999)

The Examiner rejected the claims on appeal as follows:

- A. Claims 1 through 12 and 16 through 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Sorkin and Irie.
- B. Claims 13 through 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Sorkin, Irie, and Suzuki.<sup>1</sup>

First, Appellants contend<sup>2</sup> that the combination of Sorkin and Irie does not render claims 1 through 12 and 16 through 23 unpatentable. Particularly, Appellants contend that Sorkin does not teach the following limitations as recited in independent claim 1: (A) an interface controller in direct communication with the document processing device, (B) control data communicated between the network interface and the document processing device, and (C) the interface controller being in parallel communication with the document processing device and the document processing device controller. (Br. 5 and 6, Reply Br. 2 and 3.) Similarly, Appellants contend that Irie does not teach a document processing device controller for translating job data in a format executable by the processing device, as recited in independent claim 1. (Br. 6; Reply Br. 3.)

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<sup>1</sup> Appellants' amended Brief and Reply Brief failed to particularly address this ground of rejection. We note that Appellants' arguments at pages 9 through 15 of the Brief generally discuss the rejection of claims 9 through 18 with respect to Sorkin and Irie. Since Appellants have not provided any separate arguments with respect to the combination of Sorkin, Irie and Suzuki, we deem such arguments to be waived and we will let claims 13-15 stand or fall with their parent dependent claim 8. *See infra* note 2.

<sup>2</sup> This decision considers only those arguments that Appellants submitted in the Appeal and Reply Briefs. Arguments that Appellant could have made but chose not to make in the Briefs are deemed to have been waived. *See* 37 C.F.R. § 41.37(c)(1) (vii)(eff. Sept. 13, 2004). *See also In re Watts*, 354 F.3d 1362, 1368, 69 USPQ2d 1453, 1458 (Fed. Cir. 2004).

Further, Appellants argue that the combination of Sorkin and Irie is improper because the Examiner has failed to show any motivation or suggestion to combine the cited references. (Br. 6.) Additionally, Appellants reiterate these same arguments against the Examiner's rejection of claims 2 through 23.

The Examiner, in contrast, contends that as depicted in Figure 8, Sorkin substantially teaches the limitations of claim 1. (Answer 2 and 3.) The Examiner further submits that Irie's teachings complement Sorkin's system. (Answer 3.) The Examiner therefore concludes that it would have been obvious to one of ordinary skill combine teachings of the cited references to arrive to the claimed invention. Consequently, the Examiner concludes that the combination of Sorkin and Irie renders claims 1 through 12 and 16 through 23 unpatentable. (Id.)

Additionally, Appellants argue that the combination of Sorkin and Irie does not teach control data to include object-oriented rendering data which distinguishes text, pictures, and business graphics for enhancing document processing device operation, as recited in dependent claim 17. (Br. 14.) Similarly, Appellants argue that the cited combination does not teach that the control data includes object-oriented rendering data such as page description language data about a document to be made, as recited in claim 18. (Br. 15.) In response, the Examiner contends that Sorkin and Irie in combination with knowledge available in the prior art render claims 17 and 18 unpatentable.

We affirm-in-part.

## ISSUES

The *pivotal* issue in the appeal before us are as follows:

Have Appellants shown that the Examiner failed to establish that one of ordinary skill in the art, at the time of the present invention, would have found that the combination of Sorkin and Irie renders the claimed invention unpatentable under 35 U.S.C. § 103(a)?

## FINDINGS OF FACT

The following findings of fact are supported by a preponderance of the evidence.

### The invention

1. Appellants invented a network document system (10) having a marking system (12) and a Digital Front End (DFE) controller (16) allegedly arranged in parallel with the iNIC (20) to facilitate independent communication with the marking engine 12. (Specification 3 and Figure 1.)<sup>3</sup>
2. The iNIC (20) segregates data received from the network (10) into control data and job a data. (Specification 6.)
3. The control data includes object-oriented rendering data including text, pictures, business graphics for enhancing document processing operations and page description language data about a document to be made. (Id 7.)
4. The iNIC (20) routes received control data directly to the marking engine (12) while independently forwarding received job data to the marking engine (12) via the DFE controller (16). (Id.)

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<sup>3</sup> We note that figure 1 of the drawings does not accurately depict that the DFE controller (16) and the Marking system (12) are arranged in parallel with the iNIC (20). We leave to the Examiner to consider objecting to the drawings in any further prosecution of this application.

5. The DFE controller (16) translates received job data into a data format executable by the marking engine (12). (Id 7.)

#### The Prior Art Relied upon

6. Sorkin teaches a distributed system for automatically detecting the location of a printer and for communicating with the printer in an electronic network having a client computer (14), a server (12) and a network printer (24). (Title, abstract and figure 1.)

7. As depicted in Figure 8, Sorkin teaches the network server (74) and the network printer (76) are arranged in parallel with the client computer (72).

8. Sorkin also teaches that the client computer (72) dispatches queries, job header and print data to the server (74), which routes the job header and the print data to the printer (76). (Col. 5, ll. 45-48.)

9. Sorkin teaches that after receiving a job event, the printer (76) sends an acknowledgement with its IP address to the client (72) such that the client (72) can bypass the network server (74) to directly communicate with the printer (76) during subsequent events by exchanging control data for configuring, setting up or monitoring the printer. (Abstract, col. 2, ll. 33-41, col. 5, ll. 48-59.)

10. Irie teaches a distributed system having a client (113) issuing print commands to a server (120), which spools received print requests and subsequently converts the print requests before they are forwarded to the network printer (150) for execution. (Col. 8, ll. 45-50.)

## PRINCIPLES OF LAW

### 1. OBVIOUSNESS (Prima Facie)

The Supreme Court in *Graham v. John Deere*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966), stated that three factual inquiries underpin any determination of obviousness:

Under § 103, (1) the scope and content of the prior art are to be determined; (2) differences between the prior art and the claims at issue are to be ascertained; and (3) the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy.

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). *See also In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). The Examiner can satisfy this burden by showing some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *KSR Int'l. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (Apr. 30, 2007) (*citing In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellant. *Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444. *See also Piasecki*, 745 F.2d at 1472, 223 USPQ at 788. Thus, the Examiner must not only assure that the requisite findings are made, based on evidence

of record, but must also explain the reasoning by which the findings are deemed to support the Examiner's conclusion.

## 2B. OBVIOUSNESS (Motivation)

On appeal, Appellant bears the burden of showing that the Examiner has not established a legally sufficient basis for combining the teachings of the references that the Examiner relied upon. Appellant may sustain this burden by showing that the Examiner failed to provide sufficient evidence to support that one having ordinary skill in the art would have combined disclosures of the references, as proposed by the Examiner, to yield Appellant's invention. *In re Kahn*, 441 F.3d at 987-88, 78 USPQ2d at 1336-37; *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick, Co.*, 464 F.3d 1356, 1360-1361, 80 USPQ2d 1641, 1645 (Fed. Cir. 2006). The mere fact that all the claimed elements or steps appear in the prior art is not *per se* sufficient to establish that it would have been obvious to combine those elements. *United States v. Adams*, 383 U.S. 39, 50-52, 148 USPQ 479 (1966); *Smith Industries Medical Systems, Inc. v. Vital Signs, Inc.*, 183 F.3d 1347, 1356, 51 USPQ2d 1415, 1420 (Fed. Cir. 1999). However, "[a]s long as some motivation or suggestion to combine the references is provided by the prior art taken as a whole, the law does not require that the references be combined for the reasons contemplated by the inventor." *In re Beattie*, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992). Motivation to combine references under 35 U.S.C. § 103 must come from a teaching or suggestion within the prior art, within the nature of the problem to be solved, or within the general knowledge of a person of ordinary skill in the field of



the invention, to look to particular sources, to select particular elements, and to combine them as combined by the inventor. *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 665, 57 USPQ2d 1161, 1167 (Fed. Cir. 2000).

“[A]n implicit motivation to combine exists not only when a suggestion may be gleaned from the prior art as a whole, but when the ‘improvement’ is technology-independent and the combination of references results in a product or process that is more desirable, for example because it is stronger, cheaper, cleaner, faster, lighter, smaller, more durable, or more efficient . . . . In such situations, the proper question is whether the ordinary artisan possesses knowledge and skills rendering him *capable* of combining the prior art references.” *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1368, 80 USPQ2d 1641, 1651 (Fed. Cir. 2006).

## ANALYSIS

### 35 U.S.C. § 103(a) REJECTION

#### Claims 1 through 6

As set forth above, independent claim 1 recites, inter alia, (A) an interface controller in direct communication with the document processing device, (B) control data communicated between the network interface and the document processing device, and (C) the interface controller being in parallel communication with the document processing device and the document processing device controller. As detailed in the findings of fact section above, we have found that Sorkin teaches that in subsequent communications, the client can bypass the server to directly communicate with the printer. The client exchanges control data directly with the printer

for the purpose of configuring, setting up or monitoring the printer. (Finding of fact 9.) Similarly, we have found that Sorkin teaches a client configured in parallel with the server and the printer such that the client can independently access the printer directly or communicate with the printer via the server. (Findings of fact 7 through 9.)

Next, as set forth above, independent claim 1 further requires that the document processing device controller translates job data in a format executable by the processing device. We have found that Irie teaches a server that translates print job data received from the client before forwarding such print data to be executed by the printer. In light of these findings, it is our view that the combined teachings of Sorkin and Irie amount to the document interface controller and the document processing device arranged in parallel with the network interface controller such that the network interface controller can directly exchange control data with the document processing device while the document processing device controller translates print requests received from the network interface controller before routing them to the document processing device.

Next, we agree with the Examiner that one of ordinary skill in the art would have readily recognized that Irie's teaching of converting print data at a network server before forwarding it to the printer would help reduce the amount of processing time at the printer. Irie's teaching would therefore allow print commands to be executed expeditiously once they reach the printer. We further agree with the Examiner that neither Sorkin nor Irie teaches away from the invention. It has been held that "[a] reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the

reference, or would be led in a direction divergent from the path that was taken by the applicant.” *In re Gurley*, 27 F.3d 551, 53, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994). Our reviewing Court has also held that teaching an alternative or equivalent method does not teach away from the use of a claimed method. *In re Dunn*, 349 F.2d 433, 438, 146 USPQ 479, 483 (CCPA 1965). In this case, at the time of the invention, the ordinarily skilled artisan would not have been discouraged from following the paths set out in Sorkin and Irie. Rather, the ordinarily skilled artisan would have looked to the teachings of the cited references to enhance the processing of documents in a distributed system. Therefore, it is our view that the ordinarily skilled artisan would have been motivated to combine the teachings of Sorkin and Irie to yield the invention as recited in independent claim 1. It follows that the Examiner did not err in rejecting claim 1 as being unpatentable over Sorkin and Erie.

Appellants did not offer separate arguments against the rejection of claims 2 through 6. Therefore, they fall together with independent claim 1. *See* 37 C.F.R. § 41.37(c)(1)(vii)(2004.)

#### Claims 7 through 16

As set forth in the findings of facts section above, we have found that Sorkin teaches the client computer directly communicates control data to the printer independently from the job data, as recited in independent claim 7. (Findings of facts 7 through 9.) We have also found that Irie teaches a server for translating job data received from the client before they are forwarded to the network printer. (Finding of fact 10.) We agree with the Examiner that the Sorkin-Irie combination teaches the limitations of

independent claim 7. We further agree with the Examiner that one of ordinary skill in the art would have been motivated to combine the cited references to yield the claimed invention. It follows that the Examiner did not err in rejecting claim 7 as being unpatentable over Sorkin and Erie.

Appellants did not offer separate arguments against the rejection of claims 8 through 16. Therefore, they fall together with independent claim 7. *See* 37 C.F.R. § 41.37(c)(1)(vii)(2004.)

### Claims 17 and 18

As set forth above, claim 17 requires that the control data include object-oriented rendering data including text, pictures, business graphics for enhancing document processing operations while claim 18 requires the control data to further include page description language data about a document to be made. As detailed in findings of fact section above, we have found that Sorkin teaches the client and printer directly exchange control data to include rendering data for configuring, setting up and monitoring the printer. (Finding of fact 9). We have found, however, that the control data to be directly communicated to the printer, as taught by Sorkin, does not particularly deal with object rendering data that includes text, graphics and description language about a document to be made. Rather, it is generally limited to configuration or setup data, which does not particularly deal with specific documents. Therefore, we do not agree with the Examiner that one of ordinary skill in the art would have readily recognized that data exchange for setting up and configuring a printer would necessarily include object-oriented rendering data as recited in claims 17 and 18. We further do not agree with the Examiner that the ordinarily skilled artisan would have been

motivated to combine Sorkin and Irie to yield the invention, as recited in claims 17 and 18. It follows that the Examiner erred in rejecting claims 17 and 18 as being unpatentable over Sorkin and Erie.

#### Claims 19 through 21

As set forth in the findings of facts section above, we have found that Sorkin teaches a distributed system having a client computer configured in parallel with a printer and a server. The client computer can bypass the server to directly exchange control data with the printer, as required by claim 19. Alternatively, the client can transmit job data (independently from the control data) to the printer via the server. (Findings of facts 7 through 9.) We have also found that Irie teaches a server for translating job data received from the client before they are forwarded to the network printer. (Finding of fact 10.) We agree with the Examiner that the Sorkin-Irie combination teaches the limitations of independent claim 19. We further agree with the Examiner that one of ordinary skill in the art would have been motivated to combine the cited references to yield the claimed invention. It follows that the Examiner did not err in rejecting claim 19 as being unpatentable over Sorkin and Erie.

Appellants did not offer separate arguments against the rejection of claims 20 and 21.<sup>4</sup> Therefore, they fall together with independent claim 19. *See* 37 C.F.R. § 41.37(c)(1)(vii)(2004.)

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<sup>4</sup> We note that neither Appellants' Brief nor the Reply Brief discusses the rejection of claim 21. Further, we also note that claim 21 improperly depends on claim 14. It appears that claim 21 should have depended upon claim 20. We leave it to the Examiner to address this formality.

### Claims 22 and 23

As set forth in the findings of facts section above, we have found that Sorkin teaches the client computer directly communicates control data to the printer exclusive of the flow path through the server, as required in independent claim 22. (Findings of facts 7 through 9.) We have also found that Irie teaches a server for translating job data received from the client before they are forwarded to the network printer. (Finding of fact 10.) We agree with the Examiner that the Sorkin-Irie combination teaches the limitations of independent claim 22. We further agree with the Examiner that one of ordinary skill in the art would have been motivated to combine the cited references to yield the claimed invention. It follows that the Examiner did not err in rejecting claim 22 as being unpatentable over Sorkin and Erie.

Appellants did not offer separate arguments against the rejection of claim 23. Therefore, it falls together with independent claim 22. *See* 37 C.F.R. § 41.37(c)(1)(vii)(2004.)

### CONCLUSION OF LAW

On the record before us, Appellants have shown that the Examiner failed to establish that one of ordinary skill in the art at the time of the present invention, would have concluded that Sorkin in combination with Irie renders claims 17 and 18 unpatentable under 35 U.S.C. § 103(a). However, Appellants have not shown that the Examiner failed to establish that one of ordinary skill in the art, at the time of the present invention, would have concluded that Sorkin in combination with Irie renders claims 1 through 12, 16, 19 through 23 unpatentable under 35 U.S.C. § 103(a).

Further, Appellants have not shown that the Examiner failed to establish that one of ordinary skill in the art at the time of the present invention, would have concluded that Sorkin in combination with Irie and Suzuki renders the claims 13 through 15 unpatentable under 35 U.S.C. § 103(a).

### DECISION

We reverse the Examiner's decision to reject claims 17 and 18 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Sorkin and Irie. However, we affirm the Examiner's decision to reject claims 1 through 12 and 16, 19 through 23 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Sorkin and Irie. We also affirm the Examiner's decision to reject claims 13 through 15 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Sorkin, Irie and Suzuki.

### AFFIRMED-IN-PART

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